

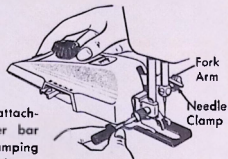
SELECT BELOW THE PROPER BUTTONHOLER

FASTENING ATTACHMENT TO MACHINE

Before bringing the attachment into position, raise the needle to its highest point. Then raise the fork arm of the Buttonholer. Guide the attachment into position from the rear of the machine so that the fork arm straddles the hub of the needle clamp, and the adapter fits onto the presser bar.

SQUARE BAR TYPE I

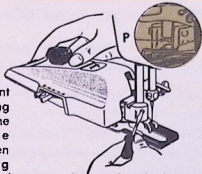
Securely fasten the attachment to the presser bar with the slotted clamping screw, using a screwdriver.



TO FIT THE PRESSER BAR ON YOUR MACHINE

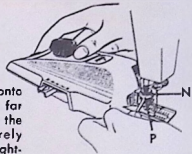
ROUND BAR TYPE II

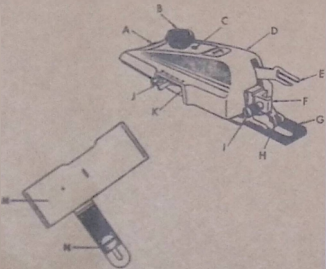
Raise the attachment until the positioning pin (P) touches the lower end of the presser bar. Tighten adapter clamping screw slightly. Lower the presser bar so that the buttonholer rests on the feed cover plate. Now straighten the buttonholer so that the side of the attachment is parallel to the side of the bed of the machine. Then tighten the adapter clamping screw until the attachment is fastened securely to the presser bar, using a screwdriver.



FORK BAR TYPE III

Push the adapter onto the presser bar as far as possible. Fasten the buttonholer securely to presser bar by tightening the holding nut (N) with your fingers. Then lower the presser bar and finish tightening nut with the wrench (P) by fitting the wrench into one of the holes in the holding nut. Be sure that the attachment is straight before the final tightening. It is most important that the attachment always be held firmly in place.





PARTS and their FUNCTION

Before using the buttonhole attachment, inspect it carefully so that you will know exactly how each part operates.

- A. Lock — Keeps template retainer plate in place.
- B. Adjusting Knob — Controls position of cloth clamp.
- C. Cover Screw — Holds cover in position.
- D. Cover — Conceals working parts of attachment.
- E. Fork Arm — Straddles needle clamp in order to move attachment.
- F. Adaptor — Part that fits on presser bar.

- G. Cloth Clamp — Holds fabric firmly.
- H. Stripper Foot — Holds fabric firmly as stitches are made.
- I. Slotted Clamping Screw — Fastens attachment to presser bar.
- J. Adjuster — Controls width of side stitch.
- K. Template Retainer Plate — Keeps templates in place.
- L. Templates — Controls size and shape of buttonholes.
- M. Feed Cover Plate — Protects the feed of the machine.
- N. Screw — Fastens feed cover plate to machine.

L



**PARTS and
their FUNCTION**

**TEMPLATES
TO INSERT**

**TO FASTEN
WIDTH OF STITCH
STRIPPER FOOT**

**HELPFUL HINTS
PREPARATION
BEGINNING
COMPLETING**

**CUTTING
VARIATIONS**

**LARGE BUTTONHOLE
EMBROIDERY**

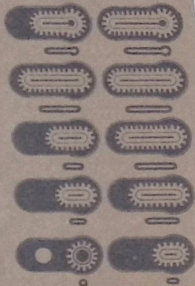
CARE

Variety of Templates

It is possible to make buttonholes of various sizes and shapes by changing the template. Buttonholes may be made straight or keyhole in shape. They also may be made in various lengths, ranging in size from $5/16''$ to $1-1/16''$.

A set of five templates accompany the attachment — $5/16''$, $5/8''$, $13/16''$, and $1-1/16''$ for straight buttonholes and $1-1/16''$ for the keyhole type. The template for the keyhole buttonhole is in the attachment when purchased.

Additional templates may be obtained in sizes $3/8''$, $1/2''$, and $15/16''$ for straight buttonholes, $5/8''$ for the keyhole-shaped buttonhole, and a new round eyelet template is now available with which you can make eyelets for belts, lacings, shower curtains and cafe curtains.

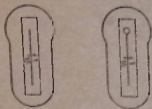


Selection of Templates

The template used will depend on the size of the button and the type of buttonhole desired. Keyhole buttonholes are usually placed in suits and coats.

On the back of each template, you will find a measurement line which indicates the size of the buttonhole and the distance the fabric may be cut.

To decide which template to use when making a buttonhole for a flat button, place the button on the measurement line on the back of the template. For a thick or irregularly shaped button, allow for this added thickness when planning for the length of the buttonhole so that the button may be easily slipped through the buttonhole. You will find it helpful to have a sample of each buttonhole in your buttonhole attachment box.



TEMPLATES
TO INSERT

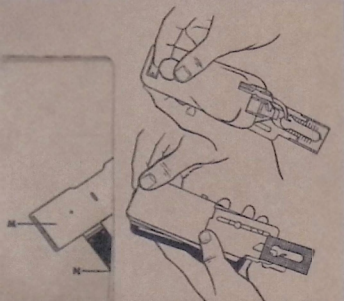
TO FASTEN
WIDTH OF STITCH
STRIPPER FOOT

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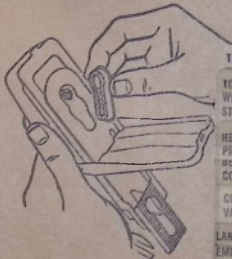
To Insert or Change Template

Unless you are making a $1\text{-}1/16$ " keyhole buttonhole, you will have to remove the template which is in the attachment when you buy it, before inserting the correct one. To do this, turn the adjusting knob (B) clockwise so that the cloth clamp (G) moves toward you. When it starts to move away from you, turn the attachment over. Place the thumb of your left hand on the hinged edge of the template retainer plate (K). Push the retainer plate away from you so that the plate will be released from the lock (A), allowing it to be opened.

With the retainer plate open, remove the template by picking it up, with the thumb and first finger placed at the curved slots. Then insert the desired template in its place.

Sometimes it is necessary to turn the knob (B) slightly so that the gears mesh, allowing the template to drop into place.

The template retainer plate can now be snapped back in position, and the buttonhole attachment is ready to be placed on the machine.



TO INSERT

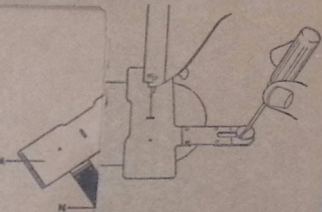
TO FASTEN
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Attaching Feed Cover Plate

Before the buttonholer can be attached to the machine, the feed of the machine must be covered by a special plate (M). To do this, remove the presser foot screw and the presser foot from the machine. Then place the feed cover plate over the feed. Fasten it firmly to the bed of the machine with special screw (N). It is most important that the needle passes directly through the center of the needle hole in the plate. In order to make sure that the plate is correctly placed, bring up the bobbin thread and then give the thread a quick pull. If the plate rattles, you know it has not been positioned accurately. Remember that this plate must always be used with the buttonhole attachment.

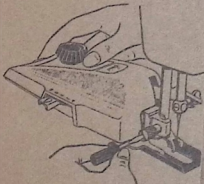
Fastening Attachment to Machine

Please refer to inside front cover.

Special Note

It often helps to tilt the buttonholer slightly to the right when attaching. This permits the screw that holds the needle to slide more easily between the prongs of the fork arm.

IMPORTANT! Attachment must be securely fastened to presser bar.



TO FASTEN
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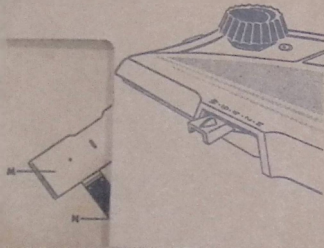
CARE

Adjusting for Width of Stitch

The adjuster (J) which is on the left side of the attachment determines the width of the stitch. By pressing down on the adjuster, you are able to move it from front to back, when it is on the machine so that various stitch widths can be obtained. When it is moved toward N, the width of the stitch is narrower than when it is moved toward W. The different widths are numbered from 1 to 6.

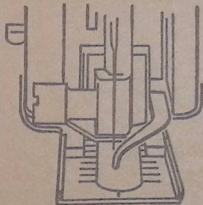
Usually a narrow stitch is used for a small buttonhole and a wide stitch for a large buttonhole. The type of fabric will also influence the width of the stitch. Heavy, loosely woven fabrics will require a wider stitch than the fine, firmly woven ones.

No matter which width you decide upon, the cutting space between the two rows of stitches will be adequate.



Function of the Stripper Foot

The curved finger called the stripper foot (H) makes it possible for you to construct a buttonhole in all types and kinds of material without skipping or breaking stitches, insuring a perfectly smooth, strong buttonhole. The stripper foot presses firmly on the fabric before each plunge of the needle, and remains in this position until the needle has been nearly withdrawn from the cloth.



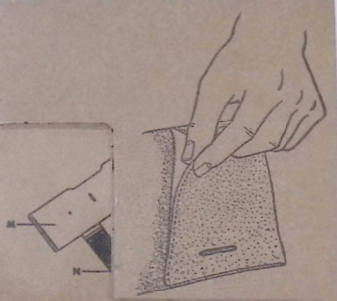
WIDTH OF STITCH
STRIPPER FOOT

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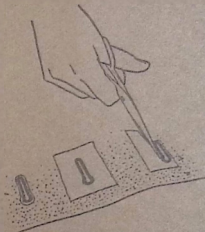
Helpful Hints

Although attractive buttonholes can be made in all types of fabrics, you will find that their appearance is improved if a piece of interfacing material is used. The type of interfacing will depend on the garment fabric. Organdy works well with the lighter and medium weight fabrics, and one of the special interfacing materials such as Pellon for the heavier ones.

If your pattern does not call for an interfacing, or you had rather not have one in your garment, you can baste an extra strip of organdy, tarlatan or paper to the underside of your work. After the buttonhole has been completed, the extra material can be cut close to the stitches and removed, or the paper may be torn away.

Sometimes the teeth of the cloth clamp interfere with the inserting of a garment which is made of a cloth having a high pile or heavy nap, or one which is loosely woven. In order to eliminate this problem, slip a small piece of cellophane, such as you find in a card case, over the buttonhole area as it is being placed under the cloth clamp. When the material is correctly positioned under the cloth clamp, the cellophane may be pulled out, and the presser bar lowered. This same procedure may be followed when the finished buttonhole is being removed from under the attachment.

It has been found that the cut edges of the fabric will not fray if the locking of the stitch occurs on the wrong side

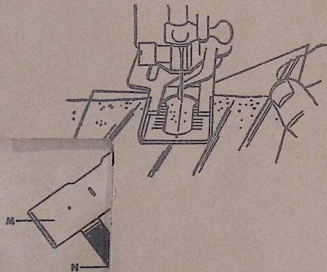


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of the buttonhole. Therefore it is sometimes necessary to adjust the bobbin tension so that it is slightly tighter than for a normal, perfect stitch.

The stitch regulator which governs the length of the machine stitch should be set for the shortest stitch or on neutral.

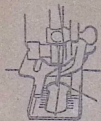
Be sure to always make a test buttonhole on the same fabric that you are using for the article you are constructing. This practice insures a perfect buttonhole. Sometimes it is necessary to stitch around the buttonhole three times in order to cover certain types of material completely.

Preparations for Making a Buttonhole

Before a buttonhole can be made in a garment, the spot where it is to be placed should be marked. This can be done with a basting line, or by putting a tiny chalk or pencil mark the correct distance from the edge of the material and another one indicating the length of the buttonhole. If several buttonholes are to be made, the distance between them should be measured carefully.

Then turn adjusting knob (B) so that the cloth clamp (G) moves all the way forward toward you and the needle appears at center line on rear of cloth clamp.

Put material under cloth clamp and bring the marking point which is closer to the edge directly under the needle and the other point in line with center mark on the front of the cloth clamp. Lower the presser bar so that cloth is held smoothly under cloth clamp.



PREPARATION

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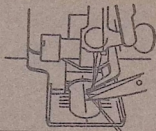
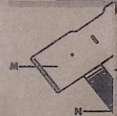
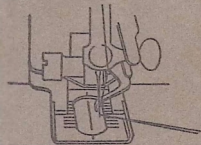
CARE

Beginning the Buttonhole

Before beginning to stitch, turn adjusting knob (B) clockwise until center line on right half of cloth clamp (G) is parallel with needle. Turn balance wheel until needle enters cloth on the outside edge of the buttonhole. Bring up the bobbin thread through the fabric.

Hold the two threads in your left hand and in front of the attachment. As you begin to stitch, allow a few stitches to cover the threads so that they are fastened securely.

Then cut them off close to the buttonhole and continue stitching.

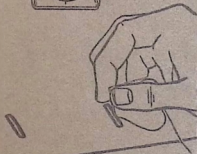
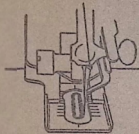


Completing the Buttonhole

The number of times that the attachment is allowed to make the buttonhole cycle depends on the effect desired. Encircling the buttonhole twice will produce a stronger as well as a prettier buttonhole.

Stitch around the buttonhole until several stitches overlap at the starting point. Remove the garment from the machine.

Draw upper thread to the wrong side. Fasten threads by threading a sewing needle with them and running the threads through the stitches on the wrong side of the buttonhole.



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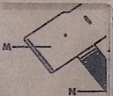
CARE



Cutting

Care should be taken when cutting a buttonhole open so that none of the machine stitches are snipped. Use a small sharply pointed pair of scissors to cut the buttonhole from end to end. A special pair of buttonhole scissors may also be employed for this purpose.

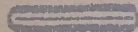
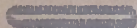
It is also possible to place the buttonhole over an empty spool and cut it with a razor.



Variations

Variations to this basic buttonhole may be produced by changing the width of the stitch and the color of the thread. In order to create the purled effect which is seen in a hand worked buttonhole, a buttonhole made with a narrow stitch is placed on top of a buttonhole which has been made with a wide stitch. First make a buttonhole with the adjuster (J) set for a wide stitch. Stitch around the buttonhole twice to give a raised, smooth look. Then without removing the buttonhole from the attachment, change the adjuster (J) so that a narrow stitch can be made. Stitch around the buttonhole again. Finish the buttonhole in the usual manner.

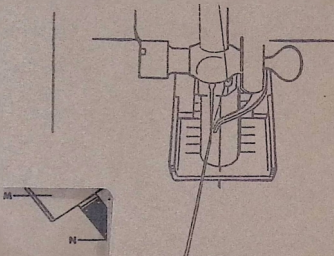
Following this method for making a buttonhole, a lovely two-toned effect may be produced by changing the color of the upper thread when the width of the stitch is changed.



CUTTING
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To Make a Larger Buttonhole

Sometimes a buttonhole which is larger than $1\frac{1}{16}$ " is needed. When this occurs the largest template is used, and by adjusting the attachment, the length of the buttonhole can be extended.

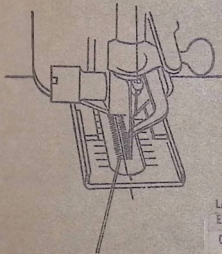
In order to make the longer buttonhole, select either of the $1\frac{1}{16}$ " templates, depending on the type of the buttonhole desired. Mark the garment with a basting line to indicate the size and position of the buttonhole.

Turn the adjusting knob (B) clockwise until cloth clamp (G) has moved toward you as far as it will go. Place the material under the cloth clamp so that the needle will be directly above the point which marks the outer end of the buttonhole, and the basting stitches are in line with the

center mark on the front of the cloth clamp. Lower the presser bar.

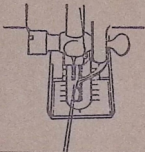
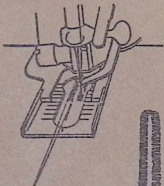
Begin to turn the adjusting knob (B) clockwise again until the needle is opposite the second line from the front on the left side of the cloth clamp. Begin to stitch, proceeding up the left side of the buttonhole, around the end, and down the right side, stopping at the second line from the front directly opposite the starting point. Be sure to leave the needle in the fabric.

One inch of the buttonhole has now been made with the end nearest you remaining open. Before continuing, you must decide which line must be brought opposite the needle in order to adjust the attachment to provide the extra length which is needed.



LARGE BUTTONHOLE
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Each space between the lines that are ahead of the needle adds $\frac{1}{8}$ " to a 1 inch buttonhole. Therefore, if you wish to add $\frac{1}{2}$ inch to the length of the buttonhole, you will turn the adjusting knob until the needle is opposite the fifth line from the rear on the right half of the cloth clamp.

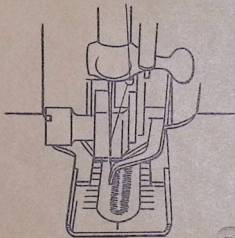
The following chart will help you make the necessary calculations. Counting the lines from the rear,

- line 1 produces a 2 inch buttonhole
- line 2 produces a $1\frac{7}{8}$ inch buttonhole
- line 3 produces a $1\frac{3}{4}$ inch buttonhole
- line 4 produces a $1\frac{5}{8}$ inch buttonhole
- line 5 produces a $1\frac{1}{2}$ inch buttonhole
- line 6 produces a $1\frac{3}{8}$ inch buttonhole
- line 7 produces a $1\frac{1}{4}$ inch buttonhole
- line 8 produces a $1\frac{1}{8}$ inch buttonhole.

After you have decided which line to use, raise the presser bar, leaving the needle in the material. As you do this, hold the fabric firmly on the bed of the machine so that it will not move out of position. Turn the adjusting knob clockwise so that the cloth clamp moves across the open end, up the entire length of the left side, across the back, and down the right side, stopping at the line that will give the necessary added length.

Lower the presser bar and continue stitching until the buttonhole is completed. As the attachment rounds the end, be sure to hold the starting threads so that they will be caught in place by the buttonhole stitches. Then cut the threads close to the stitching.

If you wish to stitch the buttonhole twice, leave the needle in the material to hold the cloth so that you can adjust the attachment. Then repeat the entire process.



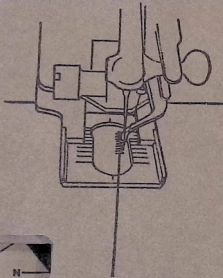
EMBROIDERY

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Embroidery

For a person who has time to practice and a desire to do interesting things with her machine, the buttonhole attachment offers possibilities for embroidering. Monograms and designs which are simple, requiring a satin stitch finish no wider than $1/8''$ can be created. Both curved and straight lines can be followed.

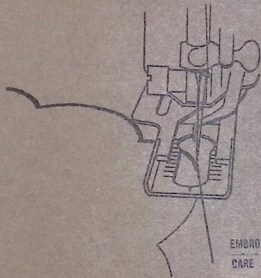
The $1-1/16''$ straight template is used for all embroidering. To begin to embroider, turn the adjusting knob (B) clockwise until the needle is at the rear of cloth clamp (G) starting down the right side. Stitch down this side until the needle is opposite the second line from the front of the cloth clamp (G). With the needle in the fabric, raise the presser bar, turn the adjusting knob until the needle is



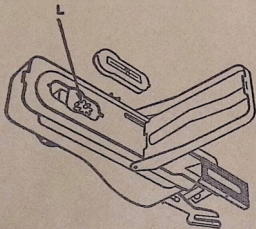
again at the upper right half of the cloth clamp. Lower the presser bar and continue to stitch. This procedure continues until the design is completed.

When following a curved line, the cloth must be turned after a few stitches have been made. Keep the needle in the fabric at the outside of the curve, raise the presser bar, turn the work, and then lower the presser bar.

In order to give a raised effect, use a filler thread. Place it on the design line so that it will be caught in the first stitch.



EMBROIDERY
CARE



Care of the Attachment

Before using the buttonholer, apply a drop of oil at the points labeled "O" in the diagram shown to the right of this page. Repeat this after every 20 hours of use or at least once a year.

Two other parts of this attachment should be lubricated at least once a year, with petroleum jelly. They are the pinion gear labeled "L" on this page and the cam labeled "L" on the facing page. Apply a small amount to the gear and both inside faces of the cam.



CAUTION

1. Be sure your machine is set for Straight Sewing when using this Buttonhole Attachment.
2. Be sure needle is in the left hand sewing position when using this Buttonhole Attachment.